

CLAIMS:

1. An apparatus for dispensing an adhesive film onto an elongated structure which has an elongated top surface and two shoulder portions each on an opposing side of the elongated top surface, the two shoulder portions defining a surface width, the apparatus comprising:

a mounting frame having first and second frame side panels opposing each other, the frame side panels together defining a trailing end, a leading end, a top side and a bottom side for the apparatus, and bottom portions of the first and the second frame side panels defining a sleeve having a sleeve width at least as wide as the surface width;

guide members on the bottom portions of the first and the second frame side panels to engage the shoulder portions of the elongated structure to allow movement of the apparatus in relation to the elongated structure while the guide members remain engaged with the shoulder portions; and

a roll mounting assembly for securely and rotatably receiving a film roll on the top side and adjacent the leading end of the apparatus.

2. The apparatus of claim 1, wherein the guide members comprise at least a first pair of guide rollers mounted within the sleeve, the first pair of guide rollers opposing each other and defining a channel into which the shoulder portions of the elongated structure enters to engage the guide rollers.

3. The apparatus of claim 2, wherein each of the guide rollers is mounted on a guide roller mounting member offset from the bottom portion of one of the frame side panels adjacent thereof.

4. The apparatus of claim 2, wherein the guide members further comprise a second pair of guide rollers mounted within the sleeve, the second pair of guide rollers longitudinally offset from the first pair of guide rollers, and the first and second pairs of guide rollers together defining the channel.

5. The apparatus of claim 2, wherein guide rollers are each mounted on a spring such that each guide roller is movable laterally.

6. The apparatus of claim 2, wherein the pair of guide rollers are each mounted on an opposing guide roller mounting member offset from the bottom portions of the frame side panels.

7. The apparatus of claim 1, wherein the roll mounting assembly comprises:

a pair of mounting walls each connected to the first and second frame side panels, the pair of mounting walls facing each other to define a receiving space to receive the film roll, wherein the film roll is adapted to hold a length of the adhesive film wrapped around an axis, and, when received in the receiving space, the film roll is rotatable to unwind the wrapped adhesive film in at least a direction toward the trailing end of the apparatus.

8. The apparatus of claim 1, wherein the frame side panels extend in a longitudinal direction and the film roll has a rotating axis which, when securely received, defines a lateral direction, the film roll being fixable in the lateral direction such that a length of film unwound from the film roll maintains a consistent lateral position in relation to the elongated structure.

9. The apparatus of claim 8, wherein the film roll, when securely received, is laterally fixed in a central position such that the film unwound from the film roll maintains a central lateral position in relation to the elongated structure.

10. The apparatus of claim 1, further comprising:  
a separation bar adjacent the trailing end of the apparatus, wherein the separation bar assists to separate a two-layer film unwound from the securely received film roll into a first layer and a second layer such that the first layer is directed in a forward direction onto the elongated structure while the second layer is directed in a backward direction toward the leading end of the apparatus.

11. The apparatus of claim 10, further comprising:  
a dividing panel disposed across the two opposing frame side panels such that the second layer of the film, after being separated from the first layer and directed backward to the leading end of the apparatus, is substantially prevented from contacting the top surface of the elongated structure.

12. An apparatus for dispensing an adhesive film onto a top surface of a handrail having a handrail width, the apparatus comprising:

a mounting frame having first and second frame side panels opposing each other, the frame side panels together defining a trailing end, a leading end, a top side and a bottom side for the apparatus, and bottom portions of the first and the

second frame side panels defining a sleeve having a sleeve width at least the same as the handrail width;

guide members on the bottom portions of the first and the second frame side panels to engage shoulder portions of the handrail to allow movement of the apparatus in relation to the handrail while the guide members remains engaged with the shoulder portions; and

a film roll assembly including a film roll mounting member and a film roll securely mounted on the film roll mounting member, wherein the film roll assembly is connected to the mounting frame on the top side of the apparatus and the film roll codes an adhesive film wrapped around an axis.

13. The apparatus of claim 12, wherein the guide members comprise at least a pair of guide rollers mounted within the sleeve, the pair of guide rollers opposing each other and defining a channel into which the shoulder portions of the handrail enters to engage the guide rollers.

14. The apparatus of claim 12, wherein the film roll mounting member comprises:

a pair of mounting walls each connected to one of the first and second frame side panels, the pair of mounting walls facing each other to define a receiving space to receive the film roll, wherein the film roll, when received in the receiving space, is easily rotatable to unwind the wrapped adhesive film in at least a direction toward the trailing end of the apparatus.

15. The apparatus of claim 12, wherein the film roll comprises a two-layer film having a first layer and a second layer.

16. The apparatus of claim 15, wherein the first layer is an application film to be applied on the top surface of the handrail, and the second layer is a liner layer.

17. The apparatus of claim 16, wherein, when the two-layer film is a wrapped toward the trailing end of the apparatus, the application film is on top of the liner.

18. The apparatus of claim 15, further comprising:  
a separation bar adjacent the trailing end of the apparatus, the separation bar assisting to separate the two-layer film unwound from the film roll into the first layer and the second layer such that the first layer is directed to the trailing end of the apparatus onto the top surface of the handrail while the second layer is directed toward the leading end of the apparatus.

19. The apparatus of claim 18, wherein the second layer is directed toward the leading end of the apparatus through a channel adjacent to the bottom side of the mounting frame.

20. The apparatus of claim 12, wherein the frame side panels have an elongated shape extending in a longitudinal direction parallel to the handrail and the film roll has a rotating axis which, when securely received, defines a lateral direction, the film roll, when securely received, being laterally fixable in a central

position such that a film unwound from the film roll maintains a consistent lateral central position in relation to the handrail.

21. The apparatus of claim 12, wherein the adhesive film has a width that matches the handrail width.

22. The apparatus of claim 12, wherein the adhesive film has a width greater than the handrail width such that the film, when centered on the top surface of the handrail, laterally extends to cover a shoulder portion of the handrail.

23. The apparatus of claim 12 wherein the adhesive film has at least one of the properties selected from a group consisting of: being decorative, informative, protective, or dust removing.

24. A method of dispensing an adhesive film on a surface of an elongated structure, the method comprising:

engaging a slidable film dispenser with the elongated structure,  
wherein the slidable film dispenser comprises:

a mounting frame defining a leading end and a trailing end;  
guide members on the mounting frame, wherein the guide  
members engage a shoulder portion of the elongated  
structure to allow movement between the slidable  
film dispenser and the elongated structure with the  
guide members remaining engaged with the shoulder  
portions;

a film roll wrapped around an axis, wherein the film roll  
comprises a two-layer film having an adhesive  
application film and a liner; and

a film roll mounting assembly for securely receiving the film roll such that the film roll is fixable in a lateral direction, wherein the two-layer film can be unwrapped toward the trailing end of the slidable film dispenser;

separating an end section of the two-layer film into an end section of the adhesive application film from an end section of the liner;

directing the separated end section of the adhesive application film toward the trailing end of the slidable film dispenser;

applying the separated end section of the adhesive application film at a beginning position on the surface of the elongated structure;

directing the separated end section of the liner toward the leading end of the slidable film dispenser;

sliding the slidable film dispenser toward the leading end to unwind the two-layer film; and

applying a desirable portion of the separated adhesive application film on the surface of the elongated structure.

25. The method of claim 24, wherein the elongated structure is an escalator or people mover handrail.

26. The method of claim 25, further comprising:

applying the desirable portion of the separated adhesive application film onto a first linear portion of the handrail;

moving the handrail to align a second portion of the handrail to a linear position; and

applying another desirable portion of the separated adhesive application film onto the second linear portion of the handrail.

27. The method of claim 24 wherein the adhesive application film has at least one of the properties selected from a group consisting of: decorative, informative, protective, or dust removing.

28. The method of claim 24, wherein the step of sliding the slidable film dispenser is done manually.

29. The method of claim 24, wherein the step of applying the separated adhesive application film on the surface of the elongated structure is done manually.